Noctua NH-L12 | Installation Manual | LGA2011

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Dear customer,

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Yours sincerely,

Roland Mossig, Noctua CEO

This manual will guide you through the installation process of the SecuFirm2™ mounting system step by step. Prior to installing the cooler, please consult the compatibility list on our website (www.noctua.at/compatibility) and verify that the cooler is fully compatible with your motherboard. Should you encounter any difficulties, please check the FAQs on our website (www.noctua.at/faqs) and don't hesitate to contact our support team at support@noctua.at. Noctua cannot be held responsible for any damage or losses caused by compatibility issues.

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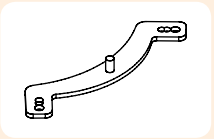
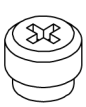
Required mounting parts:



2x NM-IMB2 Mounting-Bars

4x NM-IBT2 Bolts

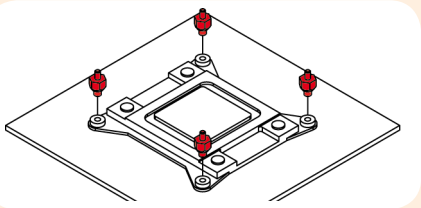


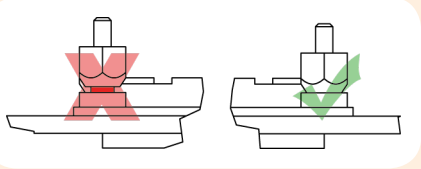
4x NM-ITS1 Thumbscrews

Step 1

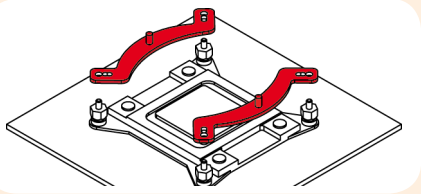
Installing the mounting-bars

First screw the NM-IBT2 bolts into the screw threads of the LGA2011 socket frame.





Then put the NM-IMB2 mounting-bars onto the bolts.



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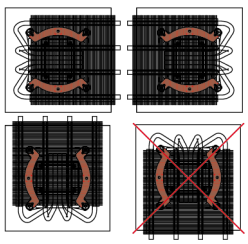

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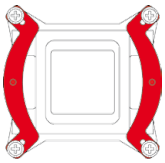
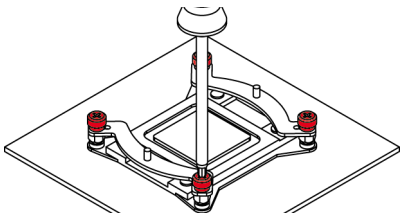


Fix the mounting bars using the NM-ITS1 thumbscrews.



Caution: Gently tighten the screws until they stop, but don't use excessive force.

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Applying thermal paste

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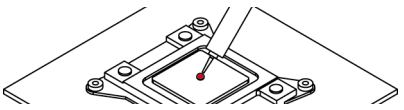

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Step 3

Fastening the heatsink to the CPU

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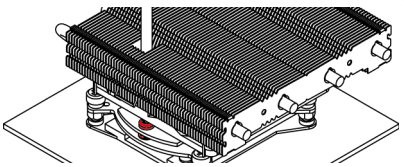

Caution: Tighten the screws until they stop.

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Fan Setup

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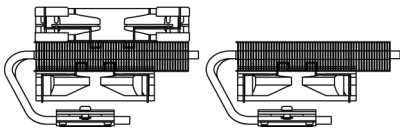

Dual fan mode height 93mm

Single fan mode height 66mm

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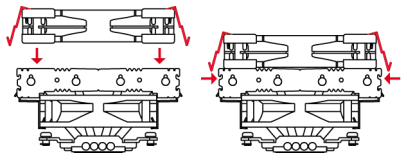

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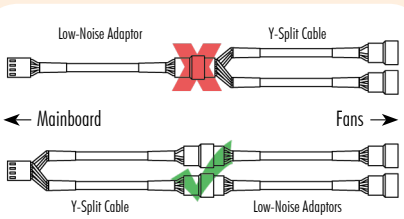

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Noctua NH-L12 | Installation Manual | LGA1366/115x/775

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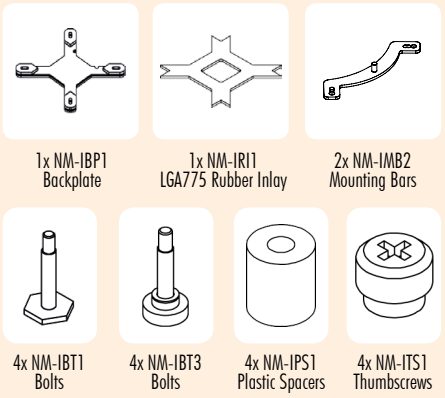


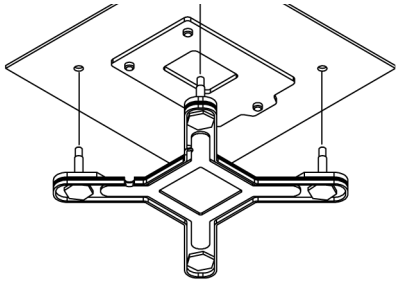
1x NM-IBP1 Backplate
1x NM-IRI1 LGA775 Rubber Inlay
2x NM-IMB2 Mounting Bars
4x NM-IBT1 Bolts
4x NM-IBT3 Bolts
4x NM-IPS1 Plastic Spacers
4x NM-ITS1 Thumbscrews

Step 1

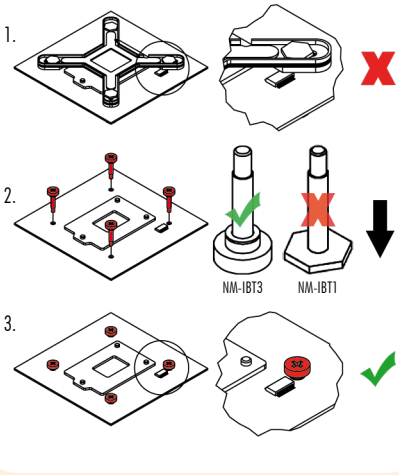
Removing the mainboard

In case you want to use the cooler on an assembled system, you first have to remove the mainboard from the case in order to be able to install the supplied backplate.

Caution: On LGA1366 and LGA115x, the supplied backplate will install over the mainboard's stock backplate, so the mainboard's stock backplate must not be taken off.



Caution: Some Mini-ITX mainboards have larger components (such as capacitors or I/O Chips) on the rear side that would make contact with the NM-IBP1 backplate. As there is a risk of damaging the mainboard when the backplate presses onto these components, please use the supplied NM-IBT3 bolts instead of the NM-IBP1 backplate and NM-IBT1 bolts when installing the NH-L12 on mainboards with larger components on the rear side. Proceed with Step 4 after inserting the NM-IBT3 bolts as shown below. If in doubt, please consult the compatibility list of www.noctua.at/compatibility or contact our support team!

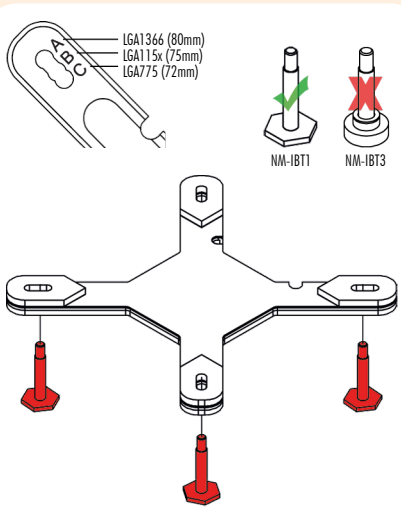


Step 2

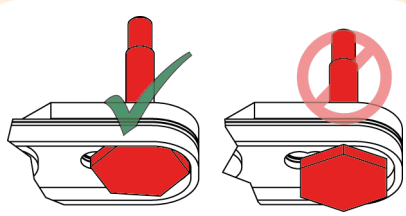
Setting up the backplate

First put the four NM-IBT1 bolts into the holes appropriate for your mainboard's CPU socket.

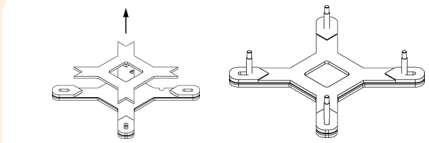
Caution: Make sure to use NM-IBT1 and not NM-IBT3!



Caution: Please verify that all four NM-IBT1 bolts are put into the appropriate holes and fully pushed in.



For use on LGA1366 and LGA115x mainboards, please remove the rubber inlay. Make sure that the rubber inlay is in place for LGA775.

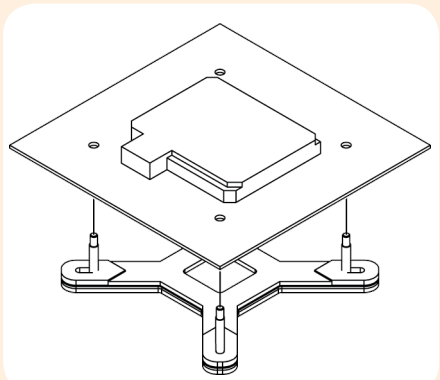


LGA1366 & LGA115x
LGA775

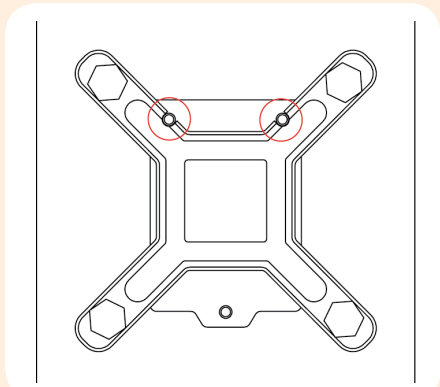
Step 3

Attaching the backplate

Place the backplate on the rear side of the mainboard so that the bolts stick through the mounting holes.



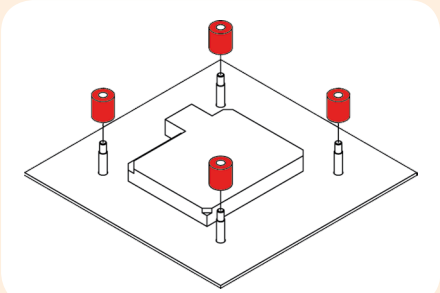
Caution: On LGA115x, please make sure that the two cuts in the supplied backplate align with the screws of the mainboard's stock backplate.



Step 4

Installing the mounting bars

First put the plastic spacers onto the bolts, then add the mounting bars.



Noctua NH-L12 | Installation Manual | LGA1366/115x/775

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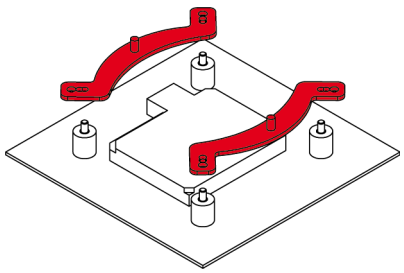

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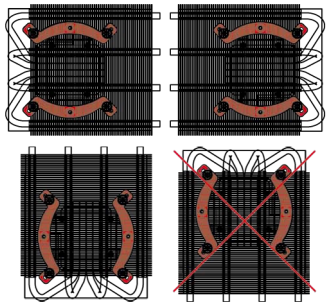

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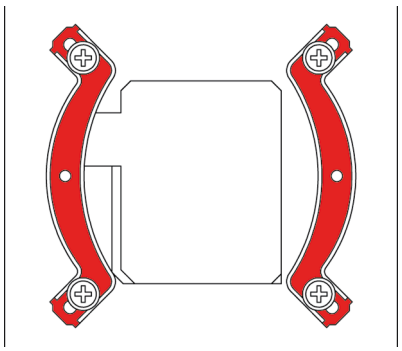
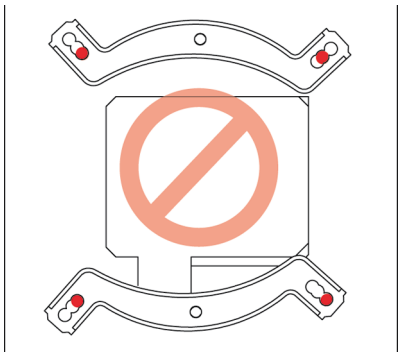
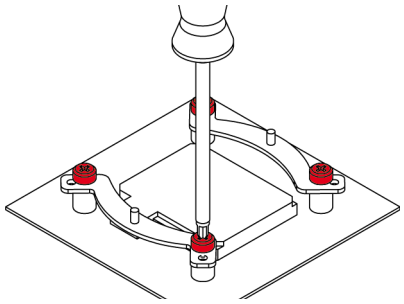


Caution: Make sure to use the correct holes on the mounting bars.



Fix the mounting bars using the 4 thumb screws.



Caution: Gently tighten the screws until they stop, but don't use excessive force.

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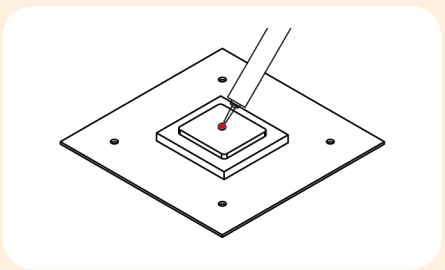

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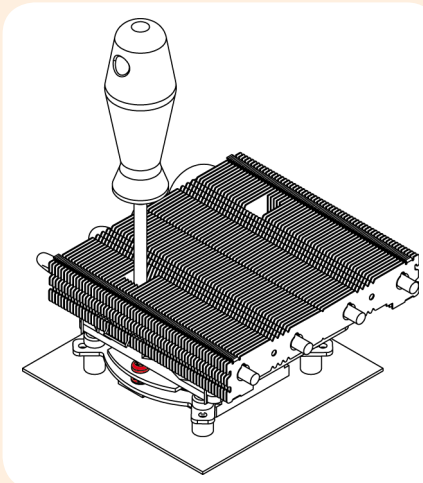

Caution: Tighten the screws until they stop.

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Fan Setup

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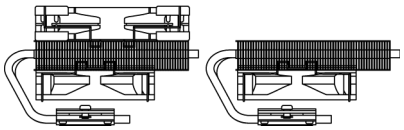

Dual fan mode height 93mm

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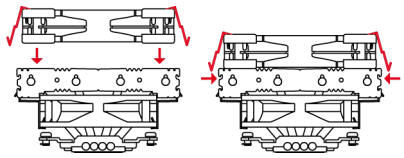

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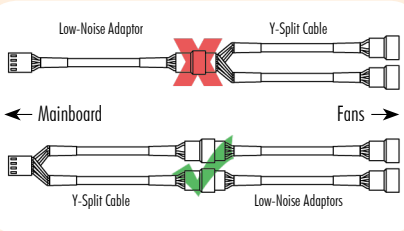

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Noctua NH-L12 | Installation Manual | AMD

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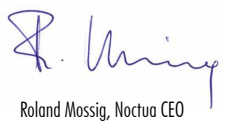

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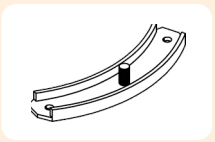
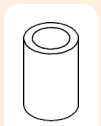


2x NM-AMB1 Mounting-Bars

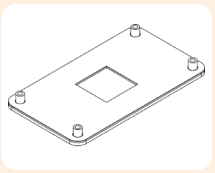


4x NM-APS1 Plastic Spacer

4x NM-ALS1 Long Screw

Caution: The SecuFirm2™ mounting system requires a backplate, which is preinstalled on most AMD mainboards.

If your mainboard doesn't have a backplate, please contact our support team at support@noctua.at.



AMD stock backplate

Step 1

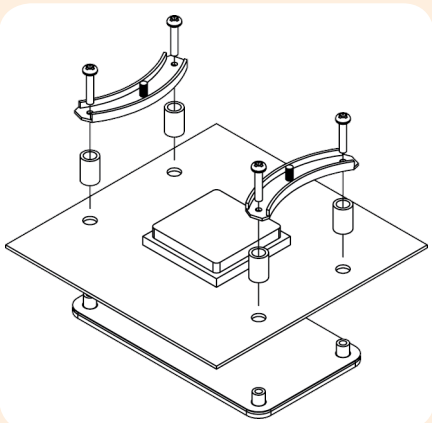
Removing the retention module

If your mainboard uses a retention module for CPU cooler installation, please remove it first. The SecuFirm2™ mounting system will install directly to your mainboard's stock backplate on the rear side of the socket.

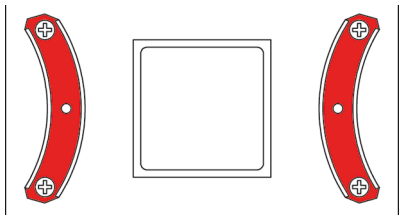
Step 2

Attaching the mounting bars

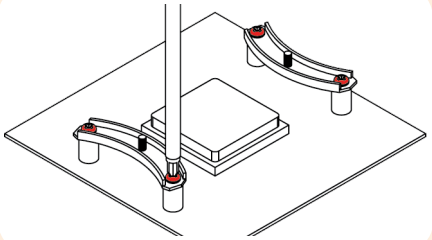
First put the plastic spacers onto the screw threads, then fix the mounting bars using the 4 long screws.



Caution: Make sure that the curved sides of the mounting bars are pointing inwards.



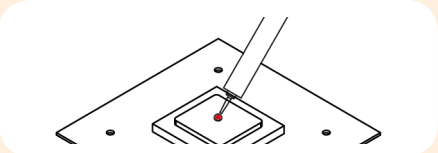
Caution: Tighten the screws until they stop.



Step 3

Applying thermal paste

If there are residual traces of thermal paste or thermal pads on your CPU, please clean them off first. Then press a small drop (4-5mm diameter) of NT-H1 onto the centre of the heatspreader.



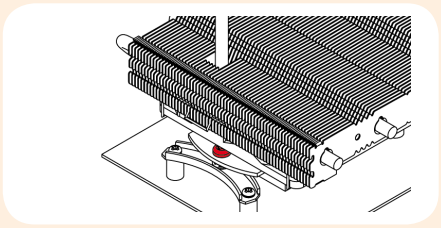
Caution: Applying too much thermal paste will lower the heat conductivity and cooling performance!

Step 4

Fastening the heatsink to the CPU

Caution: Please first take off the protection cover at the bottom side of the heatsink and remove the rubber support bar between the bottom fan and the base of the heatsink!

Put the heatsink onto the CPU and screw it to the screw threads of the mounting bars.

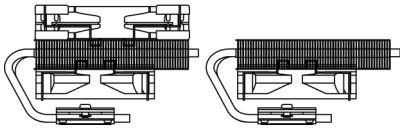


Caution: Tighten the screws until they stop.

Step 5

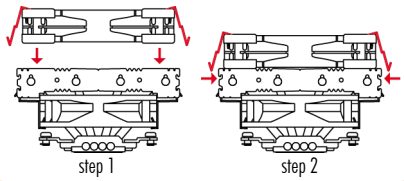
Fan Setup

The NH-L12 can be used with both fans for maximum performance or with the NF-B9 fan only in order to reduce the total height to 66mm:



Dual fan mode (height 93mm) Single fan mode (height 66mm)

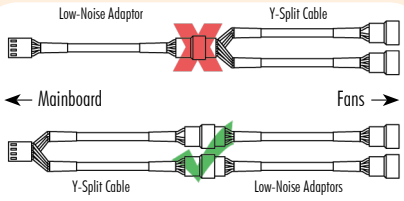
If you want to use both fans, put the NF-F12 fan back on. If you don't run the NF-F12 on the CPU cooler, you can use the supplied fan screws or silicone Vibration-Compensators to install it inside your case.



step 1 step 2

Connect the fan(s) to the mainboard. Use the supplied NA-YC1 y-split cable to connect both fans to one fan header. Depending on your CPU and the temperature inside the case, you may interconnect the supplied NA-RC6 and NA-RC7 Low-Noise Adapters (L.N.A.) in order to further reduce the fans operating noise. Use the NA-RC6 for the NF-F12 120mm fan and the NA-RC7 for the NF-B9 92mm fan.

Caution: Never use one adaptor for both fans by putting it before the y-split cable.



Caution: When using the L.N.A., check the temperature of your CPU using appropriate software (e.g. the respective applications of your mainboard manufacturer), in order to evade automatic throttling of the CPU due to the increased temperature. If the cooling performance is insufficient, please increase case ventilation or remove the L.N.A.

Warranty, Support and FAQs

Even with high-grade products and strict quality control, the possibility of defects cannot be eliminated entirely. Therefore, we aim at providing the highest possible level of reliability and convenience by offering a warranty period of 6 years and direct, fast and straightforward RMA service. Should you encounter any problems with your NH-L12, please don't hesitate to contact our support team (support@noctua.at). Please also consult the FAQ section on our website: www.noctua.at/faqs.